

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) An isolated RNA comprising an artificial intron RNA that is released in a cell, thereby silencing the function of a target gene.

2. (Previously Presented) The isolated RNA of claim 1, wherein the artificial intron RNA contains a splice donor site, a splice acceptor site, a branch site, and a poly-pyrimidine tract.

3. (Previously Presented) The isolated RNA of claim 1, wherein the cell is a mammalian cell.

4. (Previously Presented) The isolated RNA of claim 2, wherein the splice donor site contains 5'-AGGUAAGU-3'.

5. (Previously Presented) The isolated RNA of claim 2, wherein the splice acceptor site contains 5'-CCACAGC-3'.

6. (Previously Presented) The isolated RNA of claim 2, wherein the branch site contains 5'-UACUAAC-3.

7. (Previously Presented) An isolated RNA comprising an artificial intron RNA that is released in a eukaryotic cell, thereby silencing the function of a target gene.

8. (Previously Presented) An isolated RNA comprising an artificial intron RNA that is released in a eukaryotic cell, thereby silencing the function of a target gene, wherein the artificial intron RNA contains a splice donor site that includes 5'-AGGUAAGU-3', a splice acceptor site that includes 5'-CCACAGC-3', a branch site that includes 5'-UACUAAAC-3', a poly-pyrimidine tract that includes 5'-UUCUUUUUUC-3' (SEQ ID NO:2), or a combination thereof.

9-10. (Canceled)

11. (Original) A cultivated cell comprising the isolated RNA of claim 1.

12-18. (Canceled)

19. (Original) A composition comprising the isolated RNA of claim 1.

20-57. (Canceled)

58. (Currently Amended) The isolated RNA of claim 1, wherein the artificial intron contains a sequence that targets an exon of the target gene, wherein the target gene is integrin β 1.

59. (Currently Amended) The isolated RNA of claim 7, wherein the artificial intron contains a sequence that targets an exon of the target gene, wherein the target gene is integrin β 1.

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60. (Currently Amended) The isolated RNA of claim 8, wherein the artificial intron contains a sequence that targets an exon of the target gene, wherein the target gene is integrin β 1.